

6 25. A method for generating smoke for use at a volatile, potentially explosive environment,
said method comprising the steps of:

locating a supply of flammable fluid within a smoke producing chamber, said smoke producing chamber having a gas inlet to receive a non-combustible gas under pressure;

D 1 supplying said non-combustible gas under pressure to said smoke producing chamber via said gas inlet for blowing a mixture of said non-combustible gas and said supply of flammable fluid against a heating element and for creating an inert environment within said smoke producing chamber;

energizing said heating element for vaporizing into smoke said mixture of non-combustible gas and said flammable fluid that is blown against said heating element, said non-combustible gas preventing ignition and thereby avoiding the possibility of an explosion at the volatile, potentially explosive environment at which the smoke will be used; and

delivering the smoke produced by said heating element to the volatile potentially explosive environment.

7 26. The method recited in Claim 25, wherein said non-combustible gas is nitrogen gas.

8 27. The method recited in Claim 25, wherein said non-combustible gas is carbon dioxide gas.

9 28. A method for generating smoke for use at a volatile, potentially explosive environment,
said method comprising the steps of:

locating a heating element within a closed smoke producing chamber, said smoke producing chamber having a gas inlet and a smoke outlet;

delivering a flammable fluid to said heating element within the closed smoke producing chamber;

energizing said heating element for vaporizing into smoke the flammable fluid that is delivered thereto; and

blowing a supply of non-combustible gas under pressure into the closed smoke producing chamber by way of said gas inlet thereof for (1) creating an inert environment within said chamber so as to prevent ignition and thereby avoid the possibility of an explosion when said flammable fluid is vaporized into smoke by said heating element and (2) for carrying the smoke to the volatile potentially hazardous environment by way of the smoke outlet of the closed smoke producing chamber.
